

BEA's Strategic Plan for Maintaining and Improving its Economic Accounts: Plans and Progress

In 1994 and 1995, BEA conducted a comprehensive review to evaluate the performance of its economic accounts and to develop a plan to maintain and improve that performance. The resulting draft Strategic Plan for maintaining and improving BEA's national, regional, and international accounts was presented to its user community in early 1995 at a national symposium of leading economic data users hosted by the U.S. Chamber of Commerce. The symposium participants enthusiastically endorsed the overall outline of the plan, although some suggested that greater emphasis be placed on certain elements of the plan or that additional actions be included. BEA modified the final plan to reflect these suggestions. The final plan puts needed improvements to the accounts in the context of a comprehensive multi-year plan that emphasizes innovation and efficiency in providing timely, accurate, and relevant information to its users in coordination with the public and with other statistical agencies. It emphasizes updated measures of output and prices; more comprehensive and accurate measures of investment, saving, and wealth; and improved coverage of international trade and finance.

Despite the long-term nature of the plan, participants urged BEA to move forward rapidly on its more critical aspects. To make a down payment on the most urgent priorities, BEA reallocated resources from existing programs. In FY 1995, BEA transferred the Leading Economic Indicators to a private organization, The Conference Board. In FY 1996, BEA phased out its regional projections and its pollution abatement and control programs and began producing its establishment-level data on foreign direct investment from a joint project with the Census Bureau on a 5-year rather than an annual cycle. In FY 1997 and FY 1998, without any additional funds, BEA concentrated its efforts on carrying forward the strategic initiatives funded by earlier program eliminations. Judging from comments by the users of BEA's data and the business press, substantial progress has been made on improving GDP and related economic accounts. The following initial steps in BEA's Strategic Plan have been implemented:

- o **New and Improved Measures of Output and Prices:** As part of the comprehensive revision of the accounts released in January 1996, BEA introduced new featured measures of real GDP and prices, which use annual--rather than fixed--weights that allow for the effects of changes in relative prices and in the composition of output over time. These annual weights eliminate the substitution bias associated with fixed weights.

BEA has extended the improvements made to GDP in FY 1995-96 to its estimates of GDP-by-industry, gross state product, real gross product of U.S. companies' majority-owned foreign affiliates, and capital stocks.

BEA has moved forward on updating industry classifications and on extending the quality adjustment of prices used in real GDP to products in addition to computers.

- Work on the first phase of the new industry classification system--the North American Industry Classification System--was completed when the United States, Canada, and Mexico signed an agreement to adopt the new three-country industry classification system.
- BEA is conducting the first U.S. survey on a NAICS basis, with its benchmark survey of U.S. direct investment abroad for 1997.

- Work has progressed with the Bureau of Labor Statistics (BLS) and other researchers to develop improved measures of output and prices that incorporate the effects of quality change. BEA has introduced new quality-adjusted measures of output and prices for semi-conductors and telephone switching equipment and updated and improved measures of hospital care and nursing homes.
- o **Better Measures of Investment, Saving, and Wealth:** As part of the comprehensive revision, BEA also introduced a more comprehensive and consistent treatment of investment and capital--by treating government purchases of structures and equipment symmetrically with private purchases and by introducing an improved empirical basis for its estimates of all capital stocks and depreciation. Summary estimates of capital stocks, incorporating the improvements made in the GDP benchmark revision, were published, and detailed capital stock data were made available on a CD-ROM.
- o **Improved Measures of International Trade and Finance:** Work has moved ahead on improvements in the coverage of products, services, and capital:
 - BEA conducted its first benchmark survey of international trade in financial services and, in FY 1996, incorporated the results into the balance of payments accounts.
 - BEA incorporated the results of a survey (developed in conjunction with the Treasury Department and the Federal Reserve Bank of New York) of U.S. bank holdings of selected foreign short-term financial assets.
 - BEA's 1997 annual revision of the U.S. international transactions accounts incorporated the results of the first benchmark survey of U.S. portfolio investment abroad in more than 50 years (conducted by the Treasury Department).
 - BEA incorporated estimates of U.S. currency flows into the balance of payments accounts, based on estimates developed by the Federal Reserve Board.
 - BEA broadened its 1996 benchmark survey of selected international services transactions to include numerous categories of services that were not previously covered and published the results in FY 1997. The annual follow-on survey was similarly broadened.
 - BEA's 1998 annual revision of the U.S. international transactions accounts incorporated the results of the Treasury Department's benchmark survey of foreign portfolio investment in the United States.
 - BEA developed, and implemented in FY 1998, a method for estimating the full market value of imported computer software.

An outline of BEA's Strategic Plan is presented in the following table, which lists the plan's three major objectives, the actions BEA has proposed to work toward those objectives, significant milestones for fiscal years 1998-2000, and actions that have been taken to date.

Milestones and Actions in BEA's Strategic Plan

This table is based on BEA's Strategic Plan for maintaining and improving its economic accounts, which was developed in concert with data users and data suppliers in 1995. The table lays out BEA's plans, milestones, and progress to date in implementing the three major objectives of the plan: New and improved measures of output and prices, better measures of investment, saving, and wealth, and improved measures of international transactions. (For a full discussion of BEA's Strategic Plan, see the February and April 1995 and June 1996 issues of the *Survey of Current Business*.)

Objective: New and improved measures of output and prices

Proposed Actions	1998 Milestones	1999 Milestones	2000 Milestones	Actions as of FY 1998
Improvements in projections for missing source data and in seasonal adjustments	<p>Incorporate new methods into current quarter projections for categories such as inventories and merchandise trade</p> <p>Begin work with BLS and Census on further harmonization of seasonal adjustment factors</p>	<p>Incorporate new methods into current quarter projections for categories</p> <p>Continue work with Census and BLS on harmonization of seasonal adjustment factors</p>	<p>Continue work on incorporating new methods into current quarter projections for categories</p> <p>Continue work with Census and BLS on harmonization of seasonal adjustment factors</p>	<p>Work on projections postponed due to lack of funding for re-engineering (existing and incremental funding was devoted to migrating off BEA's aging mainframe)</p> <p>Improved BEA-Census seasonals for exports and BEA-BLS seasonals for wages and salaries in finance and insurance</p> <p>Improved estimates of seasonally volatile bonuses and other irregular payments</p>
Extension of quality adjustment of prices used in real GDP	Continue work on extension of quality adjustments to other high-tech products, such as cellular phones and computer software	Continue work on extension of quality adjustments	Continue work on extension of quality adjustments	Introduced quality-adjusted price and output measures for semiconductors and digital switching equipment

Proposed Actions	1998 Milestones	1999 Milestones	2000 Milestones	Actions as of FY 1998
Further conceptual work on difficult-to-measure goods and services	Identify and develop new concepts and methods for measuring difficult-to-measure goods and services	Identify and develop new concepts and methods for measuring difficult-to-measure goods and services	Identify and develop new concepts and methods for measuring difficult-to-measure goods and services	<p>BEA and BLS initiated a joint project with the National Bureau of Economic Research on the measurement of medical care</p> <p>BEA and BLS initiated a joint project with the Brookings Institution on the measurement of output in five sectors: finance, insurance, retail trade, transport, and telecommunications</p> <p>BEA incorporated improved BLS-PPI price index for hospital care and physician services</p>

Proposed Actions	1998 Milestones	1999 Milestones	2000 Milestones	Actions as of FY 1998
More frequent updating of sample frames for existing surveys, more frequent surveys for services and other sectors, and extension of existing surveys to fill gaps in coverage and to improve product and income measures of output	<p>Work with BLS on expanding coverage of compensation and with Census on minimizing loss of key national accounts source data in services and other expanding sectors</p> <p>Work with Census on expanding coverage on key national accounts source data on State and local governments</p> <p>Work with IRS and other data sources on improving the source data on corporate profits, interest, depreciation, and proprietors' income</p> <p>Introduce improved methods for measuring on-line services, cellular and other telephone services, motor vehicle leasing, brokerage and investment counseling, and casino gambling</p>	<p>Work with BLS and other source data agencies on expanding coverage of wages and salaries and employer provided benefits</p> <p>Work with Census on improving the source data for services and other key product-side components of GDP</p> <p>Work with IRS and other data sources on improving the source data on corporate profits, interest, depreciation, and proprietors' income</p> <p>Continue work on updating product side estimates</p> <p>Begin incorporating new BLS price indexes for services and Census annual surveys of business services and other professional services into improved GDP-by-industry accounts</p>	<p>Continue work with BLS and other source data agencies on expanding coverage of wages and salaries and employer provided benefits</p> <p>Continue work with Census on improving the source data for services and other key product-side components of GDP</p> <p>Continue work with IRS and other data sources on improving the source data on corporate profits, interest, depreciation, and proprietors' income</p> <p>Continue work on updating product side estimates</p> <p>Continue incorporating new BLS price indexes for services and Census annual surveys of business services and other professional services into improved GDP-by-industry accounts</p>	<p>(Funding has not been forthcoming for updating and expanding source data for either the product- or the income-side measures of GDP and these projects have been successively postponed and/or the plans scaled back)</p> <p>Incorporated into BEA's national accounts and input-output accounts, the results of surveys that reflect Census' expansion of services, especially those funded as part of the FY 1990 Boskin Initiative. Further funding has not been forthcoming. (See funding note above.)</p> <p>(See funding note above.)</p> <p>Incorporated in BEA's estimates of consumer spending more direct measures of motor vehicle leasing, cellular phone and Internet services, and gambling.</p>

Proposed Actions	1998 Milestones	1999 Milestones	2000 Milestones	Actions as of FY 1998
Introduction of new weighting schemes	<p>Improve chain-weighted analytical devices</p> <p>Introduce new unpublished tables showing GDP less computer purchases and additional detail on contributions to change</p> <p>Introduce improved measures of real GDP-by-industry and introduce new measures of industry contribution to real GDP change into GDP-by-industry accounts</p>	<p>Further improve chain-weighted analytical devices</p> <p>Introduce new BLS geometric-mean estimates from CPI components into GDP estimates for PCE</p> <p>Develop further improvements in real GDP by industry</p>	<p>Further improve chain-weighted analytical devices</p> <p>Implement improved measures of real GDP-by-industry</p>	<p>Introduced new measures of real GDP that use up-to-date annual--rather than fixed--weights that allow for the effects of changes in relative prices and the composition of output over time and eliminate the substitution bias associated with fixed weights</p> <p>Introduced new measures of real output into BEA's estimates of trade in goods, gross state product, GDP-by-industry, and gross-product of U.S. multinationals</p> <p>Introduced new measures of real depreciation and stocks into BEA's estimates of fixed reproducible wealth</p> <p>Introduced new chain-weighted procedure for measuring recent period quantities and prices that will reduce revisions in estimates for recent periods</p> <p>Introduced several new analytical devices to assist users working with BEA's new chain-weighted indexes</p>
Develop a new industry classification system	<p>Work with BLS, IRS, and Census on NAICS implementation</p> <p>Work with BLS, Census, and OMB to develop a <u>NAICS United States</u> coding manual</p>	<p>Work with BLS, IRS, and Census on NAICS implementation</p> <p>Work with BLS, Census, and OMB on developing a product classification system stemming from the NAICS industry classification system</p>	<p>Continue work with BLS, IRS, and Census on NAICS implementation</p> <p>Continue work with BLS, Census, and OMB on developing a product classification system</p>	<p>Completed international agreements on NAICS classifications and structure</p> <p>Resolved remaining NAICS issues with industry</p> <p>Completed work with Census on the design of 1997 economic census forms on NAICS basis</p> <p>NAICS manual published</p>

Proposed Actions	1998 Milestones	1999 Milestones	2000 Milestones	Actions as of FY 1998
Update and better integrate BEA's accounts within the context of new international guidelines	<p>Continue work on further integration of BEA's industry, regional, and national accounts</p> <p>Begin development of personal income satellite account</p> <p>Evaluate the role of annual input-output accounts as a framework for further integration</p>	<p>Continue work on further integration of BEA's industry, regional, and national accounts</p> <p>Continue development of personal income satellite account</p> <p>Develop data and systems to prepare estimates for international organizations that are consistent with the 1993 SNA</p> <p>Develop independent estimates of not-for-profit sector</p> <p>Develop annual input-output accounts for 1995</p>	<p>Continue work on further integration of BEA's industry, regional, and national accounts</p> <p>Continue development of personal income satellite account</p> <p>Continue development of estimates of not-for-profit sector</p>	<p>Integrated new chain-weighted and semiconductor indexes, new treatment of government capital, and new depreciation measures, where relevant, into the GDP-by-industry, international, and regional accounts</p> <p>(See funding note above)</p> <p>Completed the 1992 benchmark input-output accounts on schedule</p>

Objective: Better measures of investment, saving, and wealth

Proposed Actions	1998 Milestones	1999 Milestones	2000 Milestones	Actions as of FY 1998
Use of improved depreciation and valuation methods for estimation of fixed reproducible tangible wealth	<p>Improve estimates for RVs and oil exploration and development</p> <p>Use digital media (CD-ROM) to improve the dissemination of the wealth estimates</p>	<p>Expand empirical work on used asset prices to other assets</p> <p>Initiate work on improving estimates of inter-sectoral transfers of fixed assets</p>	<p>Expand empirical work on used asset prices to other assets</p> <p>Continue work on improving estimates of inter-sectoral transfers of fixed assets</p>	<p>Improved estimates of wealth and the consumption of fixed capital by introducing a better empirical basis for estimating depreciation and capital stocks</p> <p>Released CD-ROM</p>
Expand the coverage of investment	<p>Work with Census on expanding coverage of annual surveys of capital expenditures</p> <p>Continue long-term improvements in computer software and other types of investment</p> <p>Initiate work on extending BEA's partial estimates of government and nonprofit institutions' capital services</p> <p>Initiate research on developing regional capital stock estimates consistent with the national accounts</p>	<p>Continue work with Census on expanding coverage of annual surveys of capital expenditures</p> <p>Incorporate improvements in the treatment of computer software into the NIPA's</p> <p>Continue work on extending BEA's partial estimates of government and nonprofit institutions' capital services</p> <p>Continue research on developing regional capital stock estimates consistent with the national accounts</p>	<p>Continue work with Census on expanding coverage of annual surveys of capital expenditures</p> <p>Continue work on extending BEA's partial estimates of government and nonprofit institutions' capital services</p> <p>Continue research on developing regional capital stock estimates consistent with the national accounts</p>	<p>Provided a more complete and consistent measure of investment by treating government expenditures for equipment and structures symmetrically with private investment</p> <p>(See funding note above)</p> <p>Presented preliminary research findings on the feasibility of developing regional capital stock estimates</p>

Integration of real and financial accounts	Continue work on integration of real and financial accounts	Continue work on integration of real and financial accounts Publish integrated investment and tangible wealth estimates	Continue work on integration of real and financial accounts	Developed with the Federal Reserve a framework for a full set of accounts for the government sector based on international recommendations (Funding has not been forthcoming for work on integration, and BEA's work plan has been scaled down and stretched out)

Objective: Improved measures of international transactions

Proposed Actions	1998 Milestones	1999 Milestones	2000 Milestones	Actions as of FY 1998
Extension and revision of existing surveys and forms to cover new products, services, and financial instruments	<p>Develop estimates of the full market value of computer software</p> <p>Shift debt of nonbank financial intermediaries from direct investment to portfolio investment, in conformity with international guidelines</p> <p>Develop updated portfolio investment estimates</p> <p>For U.S. direct investment abroad, publish benchmark survey results on trade in "affiliated" services by type</p> <p>Conduct extended selected services annual survey and incorporate results into national and international accounts</p> <p>For foreign direct investment in the United States, conduct revised surveys</p>	<p>Work with Treasury and the Federal Reserve to identify and eliminate gaps and overlaps between direct investment and portfolio investment</p> <p>For U.S. direct investment abroad, publish annual series on trade in "affiliated" services by type</p> <p>Extend existing annual selected services surveys to cover key categories on a quarterly basis</p> <p>For foreign direct investment in the United States, use NAICS in the presentation of benchmark survey results</p> <p>For U.S. direct investment abroad, incorporate NAICS in benchmark survey design</p>	<p>For foreign direct investment in the United States, publish benchmark survey results on trade in "affiliated" services by type</p> <p>Conduct quarterly selected services surveys and incorporate results into balance of payments accounts</p> <p>Conduct revised benchmark survey of financial services</p> <p>For foreign direct investment in the United States, publish results of first annual survey incorporating NAICS</p> <p>For U.S. direct investment abroad, conduct NAICS-based benchmark survey</p>	<p>Developed and incorporated estimates of the full market value of computer software</p> <p>Updated treatment of financial intermediaries</p> <p>Improved estimates of the transportation of goods by truck between the United States and Canada Introduced new estimates of private placements of securities</p> <p>Began work with Treasury, the Federal Reserve, and the business community on derivatives</p> <p>Revised benchmark and quarterly surveys of U.S. direct investment abroad and foreign direct investment in the United States to cover trade in "affiliated" services by type; published benchmark survey results for U.S. direct investment abroad</p> <p>Expanded coverage of benchmark and annual surveys of selected services and incorporated results into balance of payments accounts</p> <p>Incorporated NAICS in design of benchmark survey of foreign direct investment in the United States and implemented survey</p>

Proposed Actions	1998 Milestones	1999 Milestones	2000 Milestones	Actions as of FY 1998
Extension of data exchanges with other countries and central banks			Exchange preliminary results of IMF coordinated benchmark survey with other participating countries	Continued work with IMF and other countries on coordinated definitions
Development of new surveys	<p>Collect and process data from internationally coordinated benchmark survey</p> <p>Update methodology for estimating medical services</p> <p>Continue to work with Treasury and industry on developing source data on financial derivatives</p> <p>Work with Census in developing estimates of understated exports and imports of goods</p> <p>Conduct survey of U.S. residents' foreign travel expenditures</p>	<p>Continue processing data from internationally coordinated benchmark survey and analyze preliminary data</p> <p>Implement new method of estimating medical services</p> <p>Develop, with Treasury, new/revised survey on financial derivatives</p> <p>Work with Census in developing estimates of understated exports and imports of goods</p> <p>Analyze results of travel survey</p>	<p>Analyze results of internationally coordinated benchmark survey (in consultation with other countries)</p> <p>Continue to work with Treasury on new/revised survey on financial derivatives</p> <p>Continue work with Census in developing estimates of understated exports and imports of goods</p> <p>Incorporate results of travel survey</p> <p>Incorporate results of follow-on survey of selected financial instruments of banks</p>	<p>Developed annual financial services survey</p> <p>Incorporated data from the benchmark and annual financial services surveys into the balance of payments accounts</p> <p>Assisted the IMF in the design of the coordinated benchmark survey</p>